# BRUHAT BANGALORE MAHANAGARA PALIKE
## YELAHANKA ZONE

Estimace Cost Rs. 25.00Lakhs

Name of Work:Drilling of borewells and providing pump and motors in ward no:03 of Yelahaka Satellite Town Sub Division

| Sl No | Description of Item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction (P.30, r. 9.4) PRED.SR 2008-09 | Each BW | | | | | | | |
| | Basic Rate | 1882.00 | 5 | | | | 5 | 1938.46 | 9692.30 |
| | Area weightage | 50.46 | | | | | | | |
| | TOTAL | 1938.46 | | | | | | | |
| 2 | Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strata including over burden upto 20 mts lining of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars and cap etc.,) PRED SR 2013-14 Page No 46 Item no 9.10 | Rmtr | | | | | | | |
| | 0 to 50 m | | 5 | 50.00 | | | 250.00 | 315.18 | 78795.00 |
| | 50 to 100 m | | 5 | 50.00 | | | 250.00 | 412.00 | 103000.00 |
| | 100 to 150 m | | 5 | 50.00 | | | 250.00 | 458.35 | 114587.50 |
| | 150 to 200 m | | 5 | 50.00 | | | 250.00 | 484.10 | 121025.00 |
| | 200 to 250 m | | 5 | 50.00 | | | 250.00 | 560.32 | 140080.00 |
| | 250 to 300 m | | 5 | 55.00 | | | 275.00 | 600.49 | 165134.75 |
| 3 | Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 6 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other end with a plastic protection end (including of all taxes) as per corragendum SE PRED No. /2012-13 Page No iii | Rmtr | | | | | | | |
| | | | 3 | 40.00 | | | 120.00 | | |
| | | | 2 | 45.00 | | | 90.00 | | |
| | | | | | | | 210.00 | 1325.00 | 278250.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | Providing 250mm dia PVC Pipe 6kg/cm as per specification and direction of the Engineer in Charge of the work BWSSB SR P 50 Item 1 (i) SR for 2014-15 | Rmtr | | | | | | |
| | | | 3 | 10.00 | | 30.00 | | |
| | | | 2 | 10.00 | | 20.00 | | |
| | | | | | | 50.00 | 1100.00 | 55000.00 |
| 5 | Providing and fixing 175mm Borewell Cap PRED SR 2012-13 Page No SL.No 85 page No iii | No. | 4 | | | 4 | 100.00 | 400.00 |
| 6 | Supply and delivery at site brand New laxmi/ indoval/ Lubi/ Sabar / Alalantar Calomal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by meansns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for oparation of 3PH., 50 Hz, 360/440 volts AC supply fitted with required accessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 10.00 HP 20 stage. Page No xxxx PWD SR for 2015-16 | No | | | | | | |
| | 12.5 HP 20 Stage | | 4 | | | 4 | 56200.00 | 224800.00 |
| 7 | Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1985 with latest amendments, pipes threaded at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008. 50 mm dia including Collar Heavy Class 2015-16, P-90, 1no13.15 PWD Sr 2015-16 | Rmtr | | | | | | |
| | | | 3 | 250.00 | | 750.00 | | |
| | | | 1 | 230.00 | | 230.00 | | |
| | | | | | | 980.00 | 431.00 | 422380.00 |
| 8 | Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolylic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 40/ I No. 2.10.3 4.0 Sqm mm of 36 strands 0.3mm dia Group - A, KPWD Electrical SR 2007-08 3/2008-09 4638/19.01.2009 (1x3x4.00 Sqmm PVC cable) | Mtr | | | | | | |
| | | | 3*2 | 255.00 | | 1530.00 | | |
| | | | 1*2 | 245.00 | | 490.00 | | |
| | | | | | | 2020.00 | 151.00 | 305020.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9 | Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one bolewell cap. Cable clips with bolts, nuts, valves guages etc. involved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KITWS & DB for year 2008-09 | No | | | | | | |
| | | | 4 | | | 4 | 3000.00 | 12000.00 |
| 10 | Supplying and fixing 20"x30"x2.5" pakkhar wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapcons improved wooden plugs screws etc., KPWD Electrical SR 2014-15 page no 52 item no 6.5.E | No. | | | | | | |
| | | | 4 | | | 4 | 302.00 | 1208.00 |
| 11 | Supplying of LTUG cable having aluminium conductor PVC insulated sheathed, galvanised steel wire / steel tap armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 Sqmm KPWD Electrical SR 2014-15 page no 62 item no 7.4.4 | Mtr | | | | | | |
| | | | 4 | 25.00 | | 100.00 | 140.40 | 14040.00 |
| 12 | Labour charges for laying of 1.1 K.V class UG cable (PWD Electrical SR-1999-2000, a) KPWD Electrical SR 2014-15 page number 69 item no 7.8.1 | Mtr | | | | | | |
| | | | 4 | 25.00 | | 100.00 | 10.50 | 1050.00 |
| 13 | Digging or trenching of 0.6 m x 0.5 m wide refilling the trench to the required ground level and consolidating etc., complete as per Civil SR KSRB 1-2 KPWD Electrical SR 2014-15 page number 66 item no 7.9.3 | Mtr | | | | | | |
| | For Curing Road Surface | | 4 | 25.00 | | 100.00 | 85.00 | 8500.00 |
| 14 | Supplying and laying of Class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class KPWD Electrical SR 2014-15 p n 65 item no 7.12.1 | Mtr | | | | | | |
| | 40mm dia GI pipe | | 4 | 4.00 | | 16.00 | 345.00 | 5520.00 |
| 15 | Supplying and fixing L.T. cast iron pot head suitable for 1.1 KV class UG cable filled with necessary bituminous sealing compound complete with terminals, clamps, bolts, nuts and washers etc., KPWD Electrical SR 2014-15 p No 68 item no 7.13.2 | No. | | | | | | |
| | | | 4 | | | 4.00 | 280.00 | 1120.00 |
| 16 | Supplying, fixing, wiring, earth electrode for grounding pandals, LT panels and other equipments on the meter board using 40 mm dia 2.50 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal proportion of soil and charcoal 150 mm around the pipe to complete depth. The connection from the pipe to the board etc., is to be established through GI wire of size, as per ISI specification 7.3.0 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 drought holes of 12 mm dia (PWD Electrical / No.7) KPWD Electrical SR 2014-15 page number 62 item no 7.1 | No | | | | | | |
| | | | 4 | | | 4 | 2727.00 | 10908.00 |
| 17 | Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete KPWD Electrical SR 2014-15 page no 7.1 | No. | | | | | | |
| | 63 Amps | | 2x4 | | | 8 | 180.00 | 1440.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 18 | Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications, Specification No. KBS 13-7.1-4 P.No. 90/I No. 13.55 PWD SR 2007-08 | No | | | | | | |
| | Basic Rate | 1490.00 | 4 | | | 4 | 1579.40 | 6317.60 |
| | Area weightage | 89.40 | | | | | | |
| | TOTAL | 1579.40 | | | | | | |
| 19 | Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete, P. No. 90/ I. No. 12.81.3 PWD SR 2007-08 | No | | | | | | |
| | 50mm dia | | 4 | | | 4 | 227.90 | 911.60 |
| | Basic Rate | 215.00 | | | | | | |
| | Area weightage | 12.90 | | | | | | |
| | TOTAL | 227.90 | | | | | | |
| 20 | Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc coomplete PWD SR Pno xxxviii for 2015-16 | No | | | | | | |
| | | | 4 | 4.00 | | 16 | 104.30 | 1669.00 |
| 21 | Supplying shunt kvp suitable for meter conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications PWD Electrical SR 2014-15 P no 54 item no 5.13 | No | | | | | | |
| | | | 4 | | | 4 | 1486.00 | 5944.00 |
| 22 | Supplying and fixing miniature circuit breakers/isolators on existing MCB distribution boards using necessary fixing material using complete as requireds 5 to 32 amps triple pole with all lead and lift loading, unloading and labour charges etc complete as per specificationsPWD Electrical SR 2014-15 page number 54 | No | | | | | | |
| | | | 4 | | | 4 | 1547.00 | 6188.00 |
| 23 | Fabrication supplying and mounting MS box of 16 SWG suitable for floor/wall mounting, fully weather proof with provision for boiler heat dissipation, provided with hinged front cover equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with glands and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs 0.35 P.No. 35, I. No 338 KPWD Electrical SR 2012-13 page number 67 sem no 6.41.2 | Sq.Cm | | | | | | |
| | | | 4x2 | 120.00 | 60.00 | 57600.00 | | |
| | | | 4 | 360.00 | 25.00 | 36000.00 | | |
| | | | | | | 93600.00 | 0.33 | 30888.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 24 | Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adorgy/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key nbs should be provided inside the door, canopy apron and louvers ventilators shall be provided, the combined energy meter cum- control panel board unit suitable for operation, The | No. | | | | | | | |
| | | | 4 | | | | 4 | 11000.00 | 44000.00 |
| 25 | KSRB 2-2.2 : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5mt and above in width, in hard soil not exceeding 1.5m , in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, specification, specification. No. KBS 2.1(b) / 2.3.5, No. 5/ Item No. 2.4/ PWD SR 2015-16 | Cum | | | | | | | |
| | | | 1 | 910.00 | 0.45 | 0.60 | 245.70 | 283.02 | 69530.00 |
| | Basic Rate | 257.00 | | | | | | | |
| | Area Weightage @ 6% | 16.02 | | | | | | | |
| | Total | 283.02 | | | | | | | |
| 27 | Providing and installation at site of works P.V.C Pipes including cost of pipes and specials and including lowing into trenches, laying true to line, level and perfect linking all joints, leak proof including jointing encasing the pipe around to a depth not less than 15cm with grave or selected earth available from the excavation Ex. Page No.3 item No.4.2 PRE SR2008-09 | Rmtr | | | | | | | |
| | 75mm Dia S KSC | | 1 | 910.00 | | | 910.00 | 161.71 | 147156.00 |
| | Basic Rate | 157.00 | | | | | | | |
| | Area weightage | 4.71 | | | | | | | |
| | TOTAL | 161.71 | | | | | | | |
| 28 | KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth compacting each deposited layer by ramming after watering with lead upto 50mm and lift upto 1.5m, including cost of all labour complete as per specifications. No. 6/ Item No. 2.11/ PWD SR 2015-16 | Cum | | | | | | | |
| | | | Qty. Vide Item No. 25 | | | | 245.70 | 76.32 | 18752.00 |
| | Basic Rate | 72.00 | | | | | | | |
| | Area Weightage @ 6% | 4.32 | | | | | | | |
| | Total | 76.32 | | | | | | | |
| 29 | KSRB 13.6.3-C : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and TOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 (P.list 13.37 PWD SR - 2015-16) | Each | | | | | | | |
| | | | 29 | | | | 29 | 2120.00 | 61480.00 |
| | Basic Rate | 2000.00 | | | | | | | |
| | Add Area Weightage @ 6% | 120.00 | | | | | | | |
| | Total | 2120.00 | | | | | | | |
| 30 | For SESCOM charges | LS | 4 | | | | | | 33000.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | Miscellaneous and Unforeseen Charges | L/S | | | | | | 1252.27 |
| | | | | | | | Total | 2500000.00 |

(Rupees twenty lakhs only)

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of, PRED 2014-15 & SE-ROED approved Rate.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward no: 00

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Yelahanka Satellite Sub Division
Bangalore.

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Yelahanka Division
Bangalore - 64

AS No. 112 1.1.16
TS No. 97 1.1.16

Administrative Approval
Accorded For 2500000/-
Head of A/C...P-1771
CER NO :...112..... Dt:..1.1.16

TA CE (YNK)

Technical Sanction
Accorded For 2500000/-
Head of A/C...P-1771
CER NO :...97..... Dt:..1.1.16

TA CE (YNK)